

Work Order ID 151266

Friday, September 16, 2016 3:15:13 PM

151266

Page 1

Item ID: D5162-041

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Seat Structure Assembly

Start Date: 9/19/2016 Start Qty: 1.00

1

Cust Item ID:

Required Date: 9/26/2016 Req'd Qty: 1.00

1

Customer:

Reference:

Approvals: Process Plan: EmDate: 16/09/19

Tooling:

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3016	(DEO) A1								
D3017	C								
D5162	A								
D5189	A								

105

Pick Kit

0.00

105

Packaging

Memo

0.05

Packaging

1 ea 169-26

110

Weld per dwg A/R 4130 rod Batch: M127925 0.00***110***

Large Fab

Memo

0.17

Large Fab

FABRICATE D5189-041 AS PER DWG AND BY USING DT8622.

DO NOT OPEN HOLES TO SIZE, IT WILL BE OPEN UPON FINAL ASSEMBLY.

ONLY WELD STUD D4667-041 TO TUBE. END CAP WILL BE WELDED AFTER OPENING HOLES IN TUBE.

1 ea 169-26

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Item ID:	D5162-041	Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:					Stop	*NS2*
Item Name:	Seat Structure Assembly					
Start Date:	9/19/2016	Start Qty:	1.00	*1*	Cust Item ID:	
Required Date:	9/26/2016	Req'd Qty:	1.00	*1*	Customer:	
Reference:						

Approvals:	Process Plan:	Date:	Tooling:	Date:	Run	Start	*NR1*
	QC:	Date:	SPC (Y/N):	Date:		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120	Weld per dwg A/R 4130 rod Batch: <u>M127925</u>	0.00							
120									
Large Fab	Memo	0.17							
Large Fab	FABRICATE (2) D3016-041 AS PER DWG.								
	WELD ASSEMBLY USING DT8597 WELD JIG.								
	DO NOT DRILL HOLES AS THEY WILL BE TRANSFER DRILL AT FUTHER STEP.								
	DO NOT WELD GUSSETS AND BRACKET THEY WILL BE WELDED AT A FUTHER STEP.								

1 EL 16-9-26

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Item ID: D5162-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Seat Structure Assembly
Start Date: 9/19/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/26/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Large Fab Large Fab	Weld per dwg A/R 4130 rod Batch: <u>M127925</u> Memo FABRICATE D3017-041 AS PER DWG: USE DT8598 FOR BENDING D3017-1/-3 TUBE. USE DT8621 FOR DRILLING (#30 DRILL) BACK FRAME. ***DO NOT OPEN HOLES IT WILL BE DONE AT FUTHER STEP*** USE DT8622 FOR DRILLING (#30 DRILL) D3017-5. ***DO NOT OPEN HOLES IT WILL BE DONE AT FUTHER STEP*** USE DT8598 JIG FOR WELDING TUBES, LUGS AND ONE END CAP, OTHER END CAP WILL BE WELDED AFTER OPENING HOLES.	0.00 0.17				<u>1</u>	<u>02</u>	<u>16-9-26</u>	
140 *140* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00							

SEP 27 2016

DAS
9
9-89

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Item ID: D5162-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Seat Structure Assembly
Start Date: 9/19/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/26/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

150

0.00

150

Large Fab

Large Fab

Memo

0.17

1- BOLT SEAT FRAME TO ASSEMBLY PLATE DT8624.

2- TRANSFER DRILL D5189-041 TO D3016-041 AS PER DWG USING #30
DRILL AND CLECO THEN DRILL TO FINISH SIZE.

3- TRANSFER DRILL SEAT PAN TO D5189-041 AND 3016-041.

4- TRASFER DRILL SEAT AND D3016-041 TO D3017-041 USING
DT AND USING TOOL TO ACHIEVE DESIRED ANGLE ON
BACK REST.1 2 16-9-26

155

Weld per dwg A/R 4130 rod Batch: M101725 0.00***155***

Large Fab

Large Fab

Memo

0.17

ARMREST:1- ASSEMBLE AND TRANSFER DRILL D5189-043 TO D3017-041.
OPEN HOLES TO FINISH SIZE AS PER DWG**STRUT:**

1-

SEAT BRACE:1- USE DT10132 AND DT10133 TO TRANSFER DRILL HOLES IN SEAT
PAN AND SEAT BRACE.1 2 16-9-26

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Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NB2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

160	QC5- Inspect part completeness to step on W/O	0.00	
160			
QC	Memo	0.00	
Quality Control			

165	Weld per dwg A/R 4130 rod Batch: <u>M/27925</u>	0.00	
165			
Large Fab	Memo	0.17	<u>1</u> <u>EL</u> <u>16-9-26</u>
Large Fab	SEAT FRAME:		
	1- WELD D3016-13 BRACKET, D3016-15 GUSSET AND D3016-17 GUSSET AND PER DWG		
	2- LAST STEP IS TO FINISH WELDING ALL WELDS AS PER DWG (SEAT AND BACK FRAME)		

170	QC9- Inspect visual per QSI004- Fusion Welds	0.00	
170			
QC	Memo	0.00	
Quality Control			

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Item ID: D5162-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Seat Structure Assembly
Start Date: 9/19/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/26/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
175 *175* QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00						SEP 27 2016	DAS 9 9-89
180 *180* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo CHEMICAL CONVERSION SEAT PANEL D3022-1 AND BACK PANEL D3023-1 AS PER DWG	0.00 0.03							(X1) ✓ 2016/09/27 BEB
190 *190* QC Quality Control	QC7-Inspect Chemical Conversion Coat Memo	0.00 0.00							IX 16/09/27 DAS 36 9-89

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Item ID: D5162-041 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Seat Structure Assembly
 Start Date: 9/19/2016 Start Qty: 1.00 ***1*** Cust Item ID:
 Required Date: 9/26/2016 Req'd Qty: 1.00 ***1*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
200		0.00							
200									
Small Fab	Memo	0.33				1x			16/09/27
Small Fab	(TO FABRICATE D5162-051) ASSEMBLE D3023-1 PANEL TO D3017-041 BACK FRAME AS PER DWG D5162-051								
210	QC5- Inspect part completeness to step on W/O	0.00							
210									
QC	Memo	0.00							SEP 27 2016
Quality Control									
220	Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3	0.00							
220									
Powdercoat	Memo	0.08							
Powder Coating	POWDER COAT ALL INDIVIDUAL PARTS								
	START TIME: 8:00								
	OVEN TEMPERATURE: 300								
	FINISH TIME: 9:30								

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DAS
9
9-89

DAS
34
9-89

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NS1

Stop *NS2*

Customer:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____ **Run** **Start** ***NR1***
 QC: _____ **Date:** _____ **SPC (Y/N):** _____ **Date:** _____ **Stop** ***NR2***

**Insp.
Stamp**

DAS
30
9-89

1

~~SEP 28 2016~~

DAS
36
9-88

1X

SEP 28 2016

ASSEMBLE AS PER DWG

DAS
30
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Memo

SEP 28 2016

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Item ID: D5162-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Seat Structure Assembly
Start Date: 9/19/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 9/26/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
260	Identify as per dwg & Stock Location: CA	0.00			DAS				
260					30	1			
Packaging	Memo W/ 150641	0.00			9-89				SEP 28 2016
Packaging									
270	QC21- Final Inspection - Work Order Release	0.00							
270							DAS		
QC	Memo	0.02					21		SEP 28 2016
Quality Control							9-89		

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21
9-89 SEP 28 2016

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Work Order ID: 151266

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP REV:A 14.11.05 NEW ISSUE DD VERF:JLM IPP
REV:B 15-02-06 AS PER DWG REV.A DD VERF:JLMIPP REV:C
16.08.31 ADD D3016 PARTS DD VERF:JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D3016-1		Manufactured	No			105	Each	0.0000	2	2			
D3016-1									**			EL 16-9-22	
Tube													
D3016-11		Manufactured	No			105	Each	0.0000	2	2			
D3016-11									**			EL 16-9-22	
Saddle													
D3016-3		Manufactured	No			105	Each	0.0000	4	4			
D3016-3									**			EL 16-9-22	
Tube													
D3016-5		Manufactured	No			105	Each	0.0000	2	2			
D3016-5									**			EL 16-9-22	
Tube													
D3016-7		Manufactured	No			105	Each	0.0000	4	4			
D3016-7									**			EL 16-9-22	
Tube													
D3016-9		Manufactured	No			105	Each	0.0000	2	2			
D3016-9									**			EL 16-9-22	
Saddle													
D5190-1		Manufactured	No			110	Each	5.0000	1	1			
D5190-1									**			EL 16-9-21	
Armrest Fitting													

Location

WA003

Loc Qty

5

Loc Code

45951

5

1

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause		FAULT CATEGORY			
Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐	No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐	Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐	Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐	Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐	Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐
OTHER :					

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Work Order ID: 151266

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

D5190-3 Manufactured No

110 Each 9.0000 1 1

D5190-3

Weld Pin

EL 16-9-21

Location

Loc Qty

Loc Code

WA002

9

145521

9

M4130NT0.750W.049

Purchased No

105 f 33.5020 8

8.421053

M4130NT0 750W 049

4130 RD Tube .750 x.049W

EL 16-9-28

Location

Loc Qty

Loc Code

MAT033

33.502

m134001

12.89

m135093

20.612

135709 x 13.3

12.89 28.29

D4667-041

Manufactured No

110 Each 6.0000 1 1

D4667-041

Armrest Stud Assembly

EL 16-9-21

Location

Loc Qty

Loc Code

WA002

6

140230

6

D3020-1

Manufactured No

120 Each 21.0000 4 4

D3020-1

Fitting

EL 16-9-21

Location

Loc Qty

Loc Code

WA002

21

147438

10

148092

11

4

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition			
				Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : ☐					

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

D3017-7

Manufactured No

130

Each

22.0000

3

3

D3017-7

EL 16-9-26

Lug

Location

Loc Qty

Loc Code

WA002

22

137735

11

3

148093

11

D3023-1

Manufactured No

130

Each

1.0000

1

1

D3023-1

EL 16-9-26

Back Panel

Location

Loc Qty

Loc Code

WA001

1

148095

1

M4130NT0.750W.083

Purchased

No

105

f

33.0230

2.5

2.631579

M4130NT0 750W 083

EL 16-9-26

4130 RD Tube .750 x.083W

Location

Loc Qty

Loc Code

MAT032

33.023

m134001

15.94

2.5

m135242

17.083

D3022-1

Manufactured No

150

Each

3.0000

1

1

D3022-1

EL 16-9-26

Seat Pan

Location

Loc Qty

Loc Code

WA001

3

146032

1

147586

1

147587

1

1

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

D3016-15

Manufactured No

165

Each

18.0000

2

2

D3016-15

Gusset

**

Q 16-9-26

Location

Loc Qty

Loc Code

WA002

18

119895

4

148096

14

D3016-13

Manufactured No

165

Each

10.0000

2

2

D3016-13

Bracket

**

Q 16-9-26

Location

Loc Qty

Loc Code

WA002

10

141449

10

D3016-17

Manufactured No

165

Each

26.0000

2

2

D3016-17

Gusset

**

Q 16-9-26

Location

Loc Qty

Loc Code

WA002

26

138268

26

D3017-11

Manufactured No

165

Each

40.0000

4

4

D3017-11

Cap

**

Q 16-9-26

Location

Loc Qty

Loc Code

WA001

40

142889

40

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS20600-AD4W2

Purchased

No

200

Each

370.0000

46

~~46~~ 40

DAS
36
9-89

MS20600-AD4W2

Rivet

**

16/09/27

Location

Loc Qty

Loc Code

CCK005

150

m135127

150

GA

93

m126475

6

m135058

87

40

ST308

127

m134762

127

AN4-6A

Purchased

No

240

Each

387.0000

1

1

DAS
6
9-89

AN4-6A

BOLT

**

Location

Loc Qty

Loc Code

over003

200

M134852

0

M135407

200

ST345

187

M128634

2

M134852

6

M134943

3

M135390

176

1

NAS43DD4-16FC

Purchased

No

240

Each

10.0000

2

2

DAS
6
9-89

NAS43DD4-16FC

Spacer

**

Location

Loc Qty

Loc Code

ST550

10

m133790

10

2

SEP 28 2016

DAS
36
9-89

MS20600-AD4W2

6x

129795

DAS
36
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16/09/27

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Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-4A Purchased No 240 Each 118.0000 1 1

AN4-4A

BOLT

**

Location Loc Qty Loc Code

FP001 4

m129390 4

ST346 114

m129390 114

D5159-043 Manufactured No 105 Each 1.0000 1 1

D5159-043

Seat Back Brace Assembly

**

Location Loc Qty Loc Code

ST358 1

147650 1

MS27039-4-20 Purchased No 240 Each 68.0000 4 4

MS27039-4-20

Screw

**

Location Loc Qty Loc Code

ST279 68

m132551 18

m135056 50

MS20600-AD4W4 Purchased No 240 Each 2,316.000 4 4

MS20600-AD4W4

Rivet

**

Location Loc Qty Loc Code

ST308 102

M133990 102

WA003 2214

M134955 214

M135442 2000

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6
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12-16-9-22

DAS
6
9-89

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Parent Item: D5162-041

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Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-1-19

Purchased

No

240

Each

129.0000

4

4

MS27039-1-19

Screw

135774 X 3

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

GA

82

m134134

82

ST280

47

m135058

1

m135603

46

D3024-1

Manufactured

No

240

Each

20.0000

3

3

D3024-1

Spacer

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

ST015

20

145464

8

148104

12

MS27039-1-17

Purchased

No

240

Each

177.0000

1

1

MS27039-1-17

Screw (601.1954)

DAS
6
9-89

Location

Loc Qty

Loc Code

GA

149

m127831

149

ST280

28

120142

28

MS24693-S49

Purchased

No

240

Each

200.0000

4

4

MS24693-S49

Screw

DAS
36
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

ST286

200

m130835

200

16/09/28
130046 (4)

Friday, September 16, 2016 3:15:13 PM

Shop Packet Print

Page 7

Picklist Print

Friday, September 16, 2016 3:15:13 PM

Page 8

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

NAS1149D0332J

Purchased

No

240

Each

1,764.000

30

30

NAS1149D0332J

Washer

DAS
6
9-88

SEP 28 2016

Location

Loc Qty

Loc Code

CA

6

m129682

6

FP001

204

m134848

204

GA

300

m134848

300

ST260a

1200

m135566

600

m135672

600

ST264

54

m135536

54

MS20600-AD4W5

Purchased

No

240

Each

369.0000

8

8

MS20600-AD4W5

Blind Rivet

DAS
6
9-88

SEP 28 2016

Location

Loc Qty

Loc Code

ST308

232

m132769

232

WA004

137

m131618

134

m132640

3

Picklist Print

Friday, September 16, 2016 3:15:13 PM

Page 9

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L3

Purchased

No

240

Each

1,829.000

17

17

MS21042L3

Nut

Location

Loc Qty

Loc Code

FP001

7

M130922

7

GA

261

m134360

112

m135135

149

OVER007

600

m135530

600

ST303

961

m135407

418

m135600

543

NAS1149D0432J

Purchased

No

240

Each

699.0000

17

17

NAS1149D0432J

WASHER

Location

Loc Qty

Loc Code

GA

26

m131026

26

ST264

673

m134676

673

D5159-041

Manufactured

No

105

Each

3.0000

1

1

D5159-041

Seat Back Brace Assembly

Location

Loc Qty

Loc Code

ST358

3

147711

2

148107

1

DAS

6

9-89

SEP 28 2016

DAS

6

9-89

SEP 28 2016

CL 16-9-22

Picklist Print

Friday, September 16, 2016 3:15:13 PM

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

AN4-14A

Purchased

No

240

Each

355.0000

2

2

AN4-14A

Bolt

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

FG

5

122141

5

over003

300

M135390

100

M135407

100

M135671

100

ST344

50

M133998

12

M135056

38

2

D3031-1

Manufactured

No

240

Each

6.0000

2

2

D3031-1

Loop

DAS
26
16/09/2016

Location

Loc Qty

Loc Code

GA

6

134318

2

145241

4

2

AN3-12A

Purchased

No

240

Each

248.0000

3

3

AN3-12A

Bolt

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

over003

225

m135603

225

ST349

23

m133064

16

m134257

7

3

Picklist Print

Page 11

Friday, September 16, 2016 3:15:13 PM

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS21042L4

Purchased

No

240

Each

1,566.000

8

8

MS21042L4

Nut

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

FP001

34

m133363

34

GA

412

m133769

104

m135058

308

OVER007

500

m135603

500

ST303

620

m135470

620

D2199-31

Manufactured

No

105

Each

11.0000

1

1

D2199-31

Strut Details

16-9-26

Location

Loc Qty

Loc Code

ST352

11

148109

1

148110

10

MS27039-1-20

Purchased

No

240

Each

89.0000

2

2

MS27039-1-20

Screw

DAS
6
9-89

SEP 28 2016

Location

Loc Qty

Loc Code

ST280

89

124326

89

Picklist Print

Page 12

Friday, September 16, 2016 3:15:13 PM

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

MS27039-4-21

Purchased

No

240

Each

21.0000

2

2

MS27039-4-21

Screw

DAS
9-28-2016
SEP 28 2016

Location

Loc Qty

Loc Code

ST279

21

m132803

21

MS27039-1-18

Purchased

No

240

Each

1,758.000

3

3

MS27039-1-18

Screw

DAS
9-28-2016
SEP 28 2016

Location

Loc Qty

Loc Code

GA

247

123522

51

124326

196

over006

1171

124326

1171

ST280

340

124326

340

D5159-045

Manufactured

No

105

Each

4.0000

1

1

D5159-045

Seat Rib Assembly

ea 16-9-26

Location

Loc Qty

Loc Code

ST358

4

138038

1

146076

1

147708

2

Picklist Print

Page 13

Friday, September 16, 2016 3:15:13 PM

Work Order ID: 151266

151266

Parent Item: D5162-041

D5162-041

Parent Item Name: Seat Structure Assembly

Start Date: 9/19/2016

Required Date: 9/26/2016

Start Qty: 1.00

Required Qty: 1.00

AN970-4

Purchased

No

240

Each

102.0000

1

1

AN970-4

Washer

DAS

6

9-89

Location

Loc Qty

Loc Code

ST260a

50

m135600

50

ST321

52

m133769

3

m133992

1

m135390

48

SEP 28 2016



DESIGN <i>CP</i>	DRAWN BY <i>CP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>#</i>	APPROVED <i>#</i>	DRAWING NO. D3016	REV. A SHEET 1 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY	SCALE NTS
A	01.05.18	NEW ISSUE	

QTY	PART NUMBER	DESCRIPTION	MATERIAL
X	D3016-041	SEAT FRAME ASSEMBLY	N/A
1	D3016-1	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
2	D3016-3	TUBE	AISI 4130N TUBE, Ø0.75 DIA x 0.049 WALL (M4130N-T0750W049)
1	D3016-5	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
2	D3016-7	TUBE	AISI 4130N TUBE, Ø0.50 DIA x 0.049 WALL (M4130N-T0500W049)
1	D3016-9	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-11	SADDLE	AISI 4130N TUBE, Ø1.00 DIA x 0.120 WALL (M4130N-T1000W120)
1	D3016-13	BRACKET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-15	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
1	D3016-17	GUSSET	AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
2	D3020-1	FITTING	N/A

NOTES

- 1) WELD PER DART QSI 004
- 2) ON SHEET METAL PARTS, BREAK ALL UNMARKED CORNERS 0.020-0.040
- 3) FINISH: POWDER COAT GREY SANDTEX (REF. 4.3.5.6) PER DART QSI 005 4.3
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 151246
dem 16/09/19

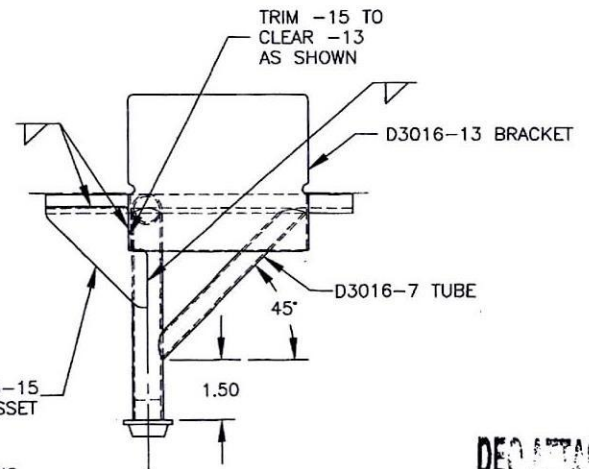
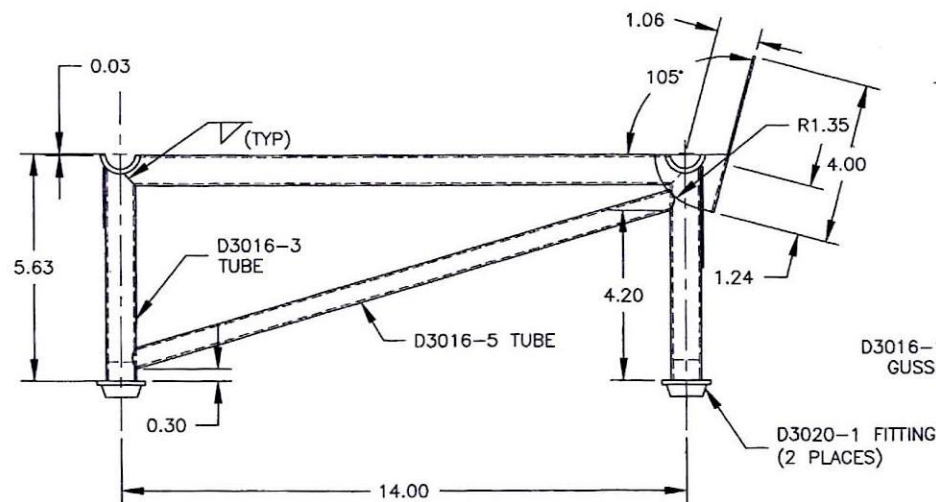
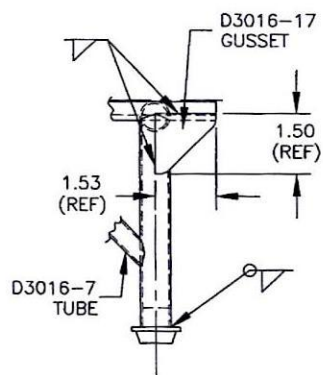
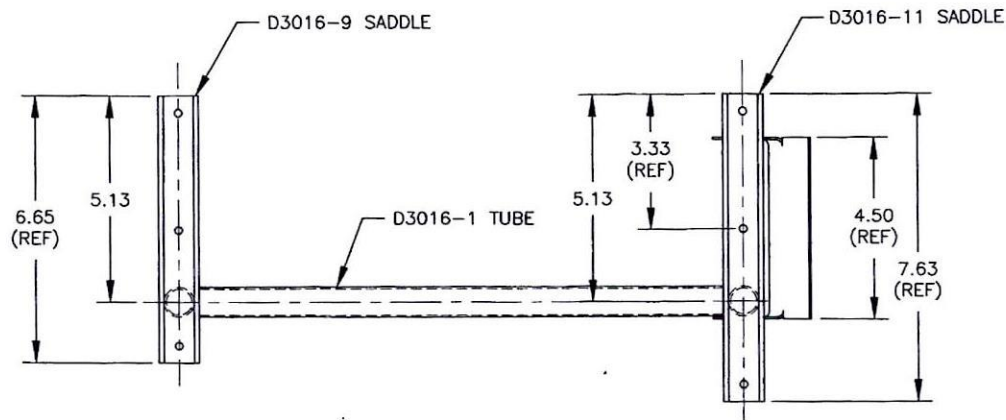
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RELEASED
01.05.30

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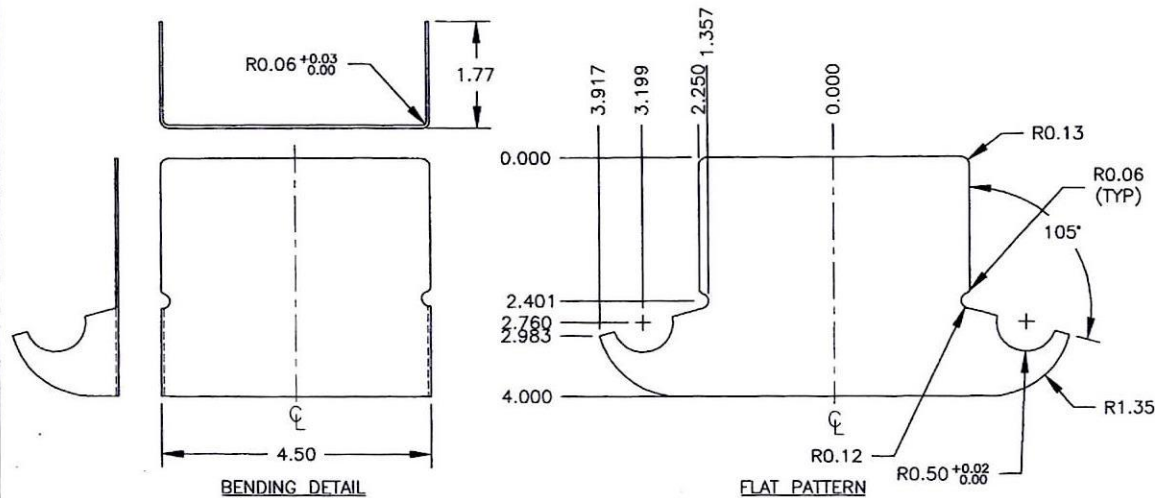
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D3016-041 SEAT FRAME ASSEMBLY

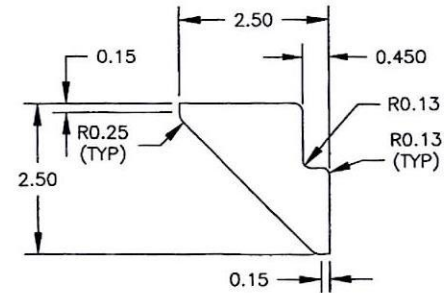


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RELEASED
01.05.30

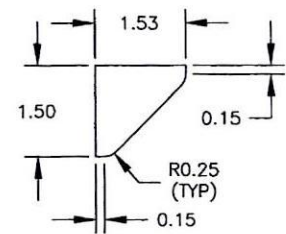
COPYRIGHT © 2001 BY DART AEROSPACE LTD.		DESIGN	UP	DRAWN BY	UP	DART	DART AEROSPACE LTD. HAWKESBURY, ONTARIO, CANADA
THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.		CHECKED	#	APPROVED	#	DRAWING NO. D3016	REV. A SHEET 2 OF 3
DATE 01.05.18		TITLE SEAT FRAME ASSEMBLY		SCALE 1:3			



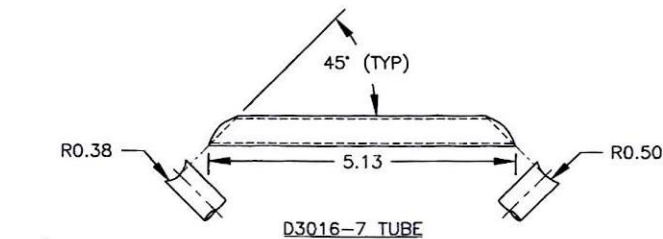
D3016-13 BRACKET



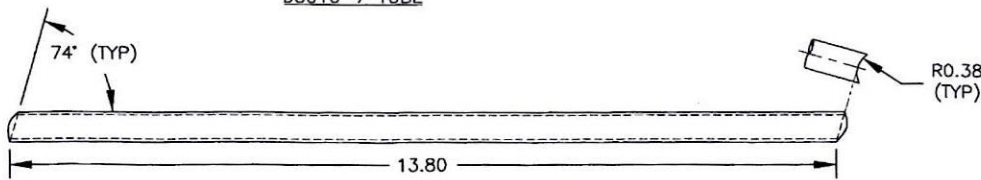
D3016-15 GUSSET



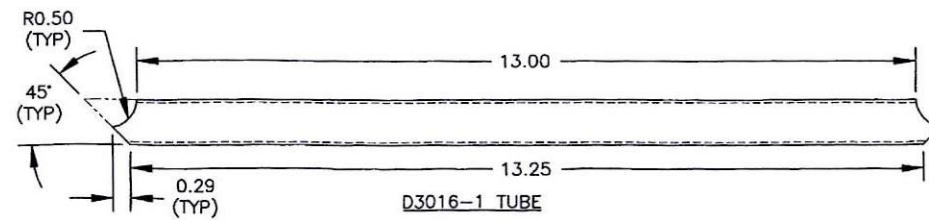
D3016-17 GUSSET



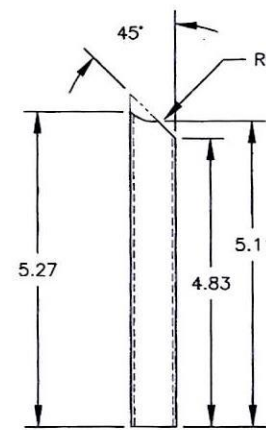
D3016-7 TUBE



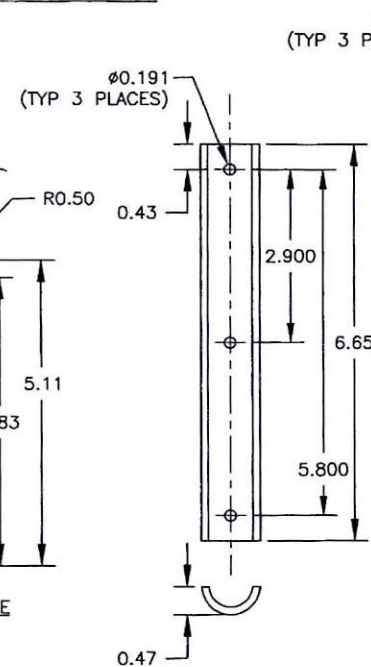
D3016-5 TUBE



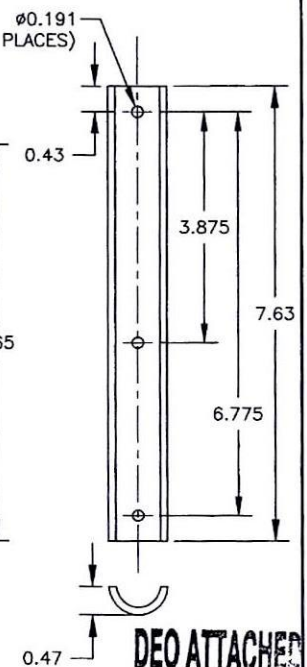
D3016-1 TUBE



D3016-3 TUBE



D3016-9 SADDLE



D3016-11 SADDLE

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DESIGN	CP	DRAWN BY	CP	DART	DART AEROSPACE LTD. HAMPSHIRE, ONTARIO, CANADA
CHECKED	★	APPROVED	★	DRAWING NO.	D3016
DATE	01.05.18	TITLE	SEAT FRAME ASSEMBLY	SHEET 3 OF 3	SCALE
					1:2

DEO ATTACHED
RELEASED
9.05.30

DRAWING NO. D3016	TITLE SEAT FRAME ASSEMBLY	REV. A	DART AEROSPACE LTD ENGINEERING ORDER	D.E.O. NO. D3016-A-1	SHEET NO. SHEET 1 OF 1	SCALE NTS
DRAWN 1	CHECKED UP	MFG. APPR. RE	APPROVED MP	DE APPR. MP		
DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	DATE 10.01.29	

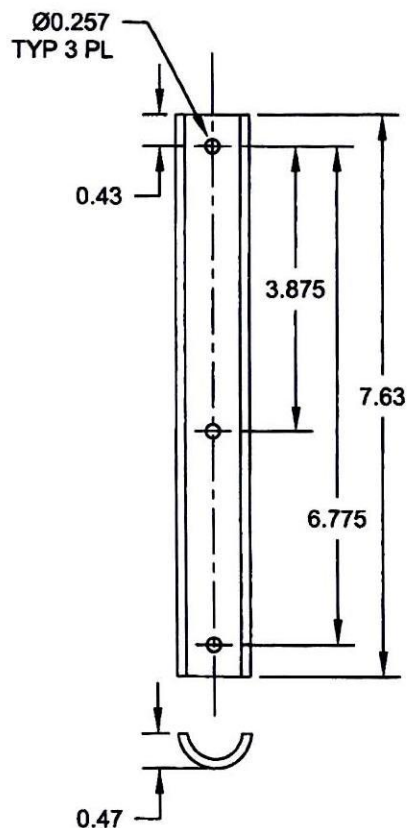
PURPOSE:

TO REVISE D3016-11 SADDLE'S HOLE SIZES

CHANGE:

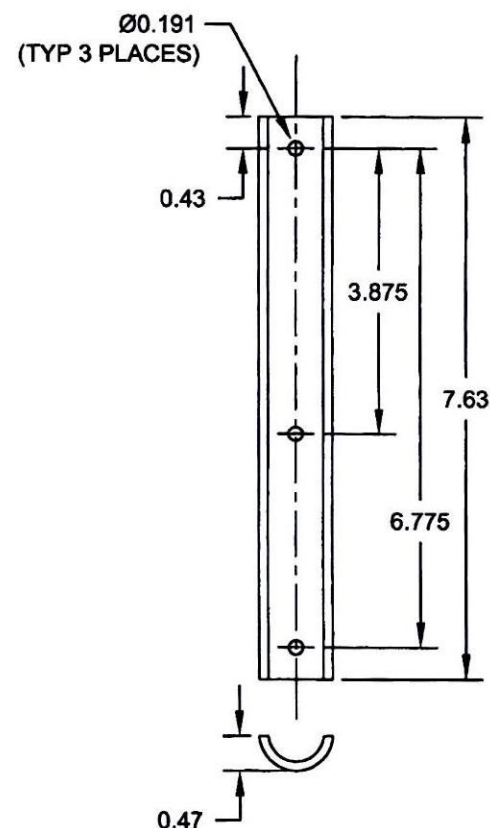
DETAIL D3016-11 SADDLE (SHEET 3): Ø0.257 TYP 3 PL WAS Ø0.191 (TYP 3 PLACES) AS SHOWN:

IS:

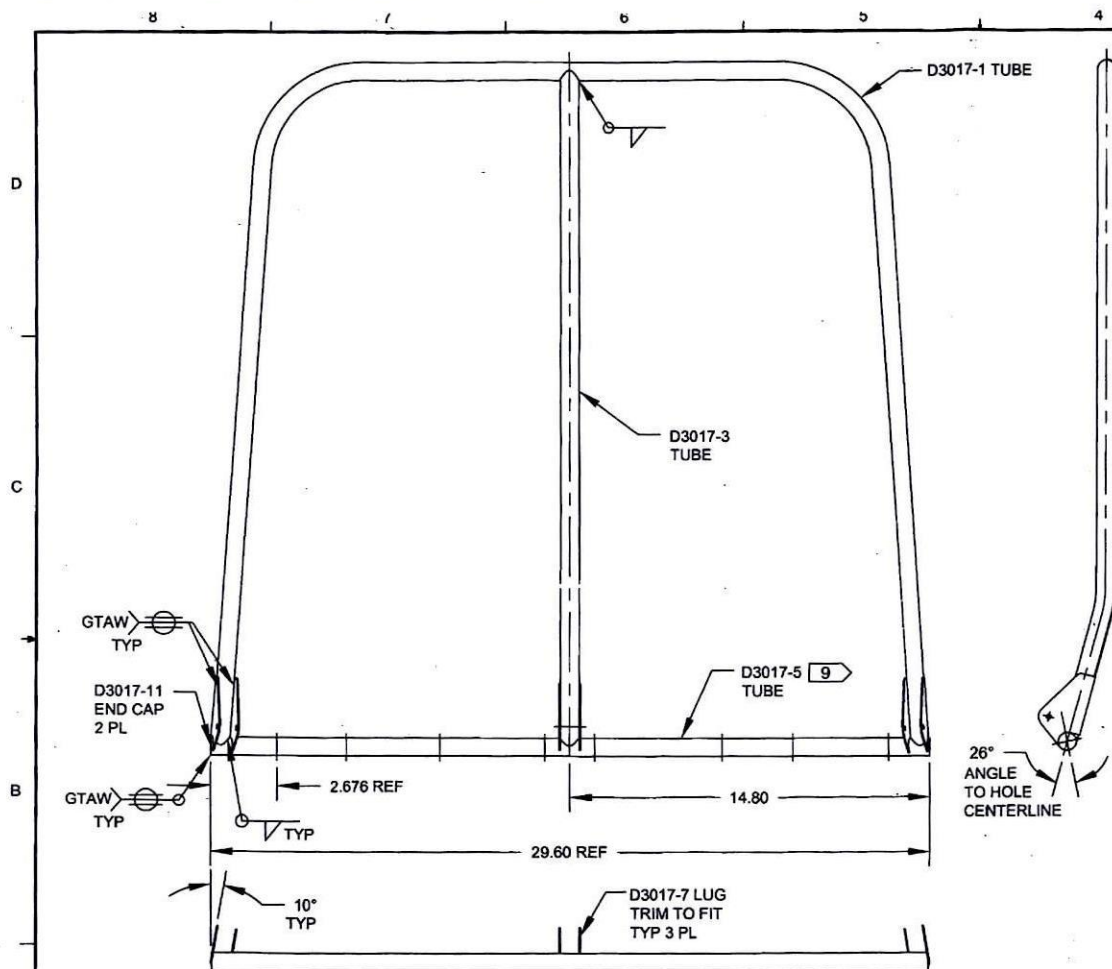


D3016-11 SADDLE

WAS:



D3016-11 SADDLE



ITEM No.	QTY	PART NUMBER	DESCRIPTION
	X	D3017-041	BACK FRAME ASSEMBLY
1	1	D3017-1	TUBE
2	1	D3017-3	TUBE
3	1	D3017-5	TUBE
4	3	D3017-7	LUG
5	2	D3017-11	END CAP

DRILL Ø0.128 HOLES TO LINE UP WITH D3023-1 BACK PANEL

26°
ANGLE TO HOLE
CENTERLINE

D3017-041 BACK FRAME ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3017-041" USING FINE POINT PERMANENT INK-MARKER
- 7) WEIGHT: 4.50 lbs
- 8) WELD PER DART QSI 004
- 9) ROTATE SO THAT PILOT HOLES ARE ANGLED AS SHOWN IN END VIEW.

RELEASED

2015 FEB 04

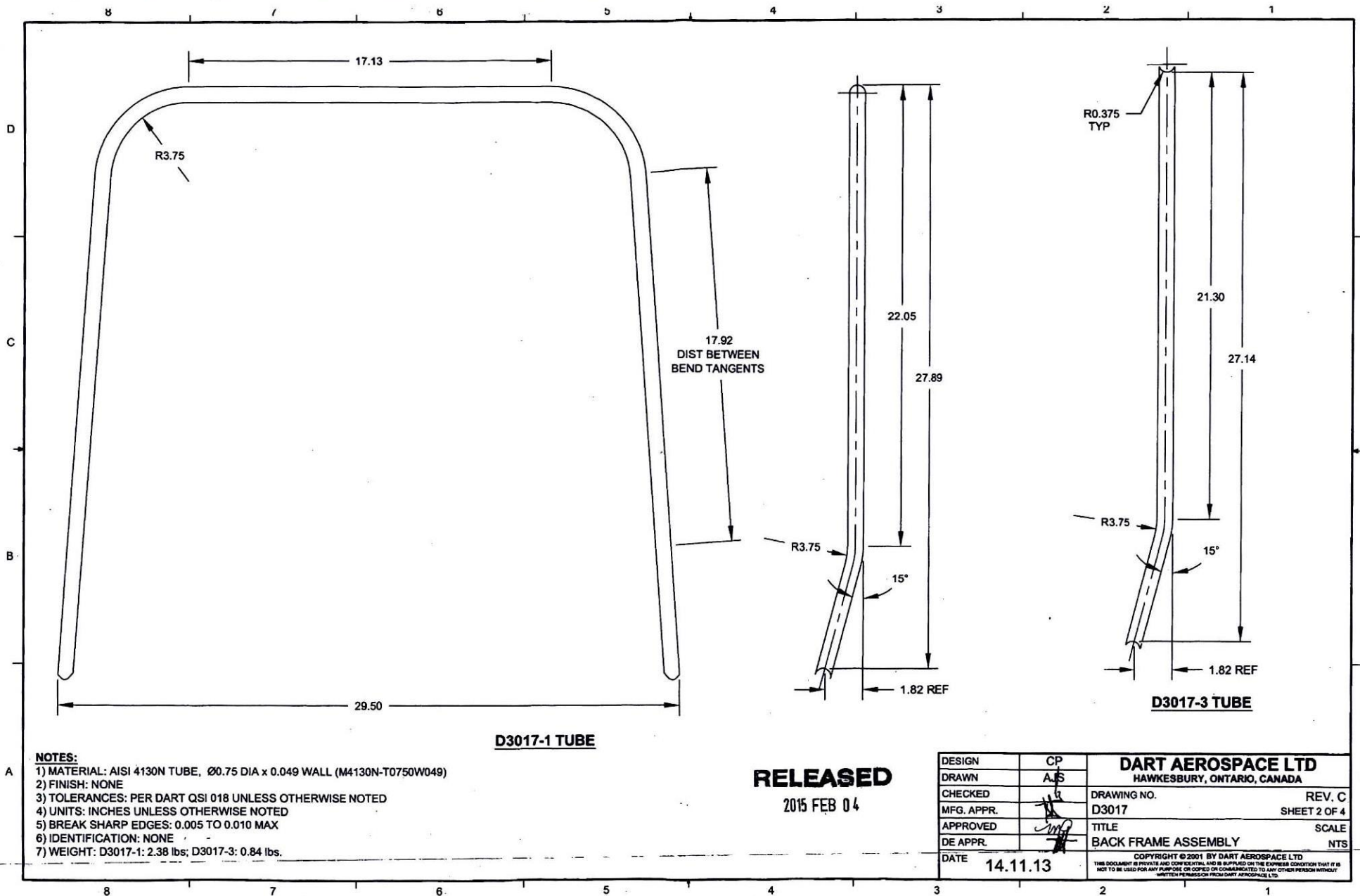
SCN 15-522 QP

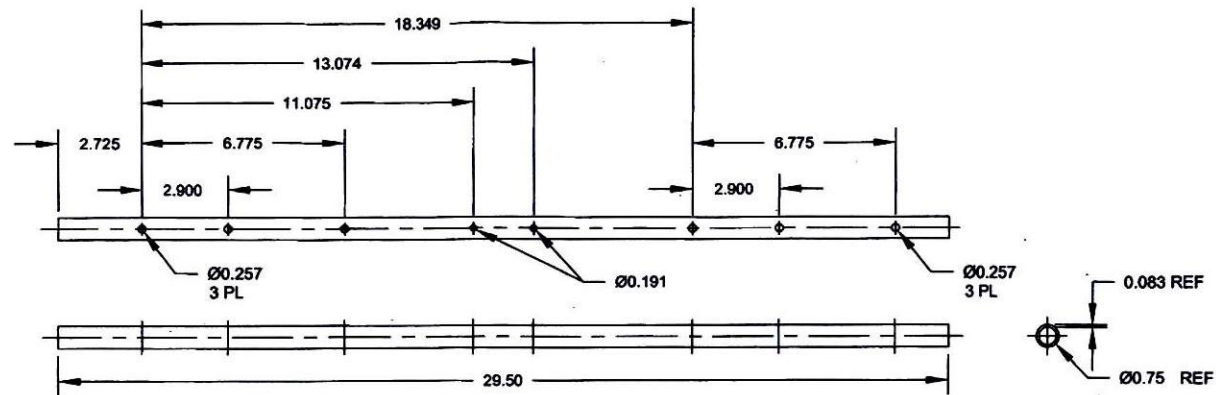
C	FINISH REMOVED (TO BE APPLIED AT NEXT ASSY)	AJS	14.11.13
B	REFORMAT DWG, -5 TUBE WALL THKNS REVD (A8-3) SHEET 3 & 4 ADDED TO CLARIFY DRAWING. RADIUS CHANGED FROM R4.00 TO R3.75 (B4-2, B2-2). HOLE SIZE CHANGED FROM Ø0.191 TO Ø0.257 (C6-3, C3-3)	JPH	10.01.13
A	NEW ISSUE	CP	01.05.18
REV.	DESCRIPTION	BY	DATE
DESIGN	CP		
DRAWN	AJS		
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	14.11.13		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. REV. C
D3017 SHEET 1 OF 4
TITLE SCALE
BACK FRAME ASSEMBLY NTS

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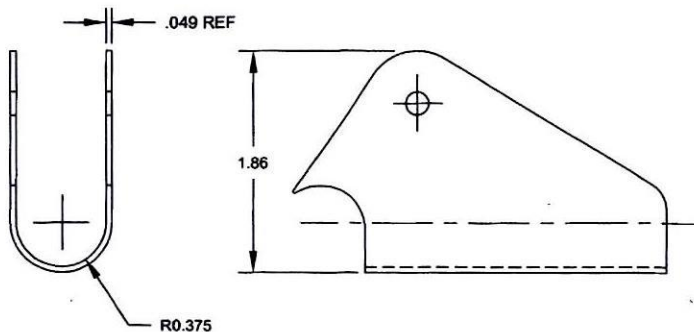
D3017-5 TUBE

NOTES:

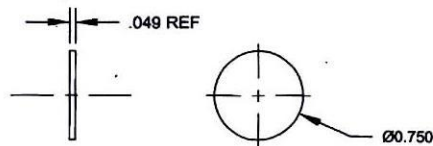
- 1) MATERIAL: AISI 4130N TUBE, $\varnothing 0.75$ DIA x 0.083 WALL (M4130N-T075W083)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.89 lbs

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO.	REV. C
MFG. APPR.		D3017	SHEET 3 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BACK FRAME ASSEMBLY	NTS
DATE	14.11.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

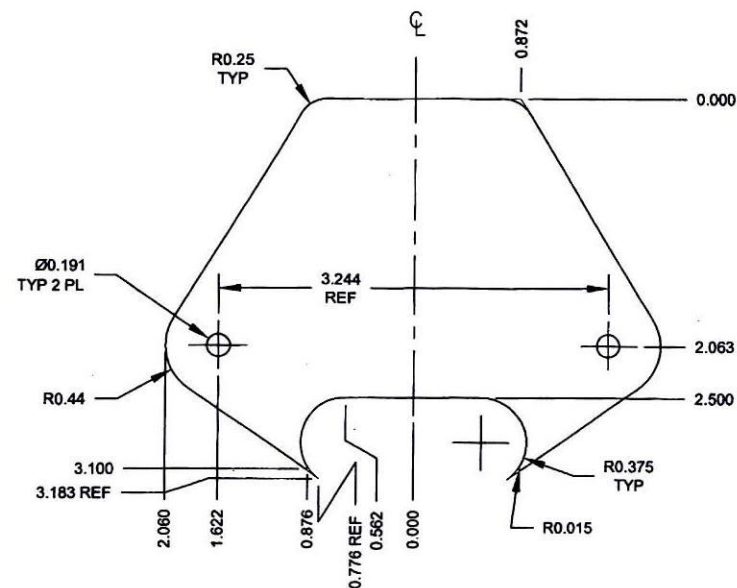
8 7 6 5 4 3 2 1



D3017-7 LUG
BENDING DETAIL
MAKE FROM D3017-7F



D3017-11 END CAP



D3017-7F FLAT PATTERN
PART IS SYMMETRIC
ABOUT CENTERLINE

NOTES:

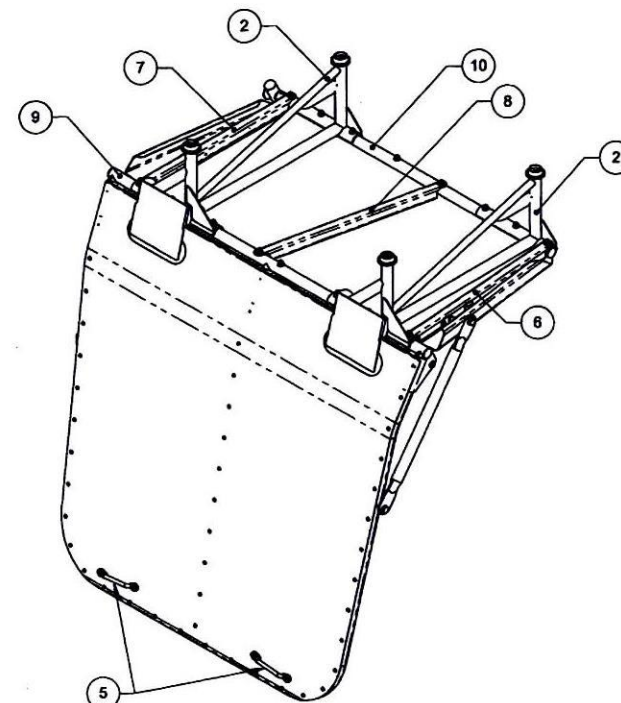
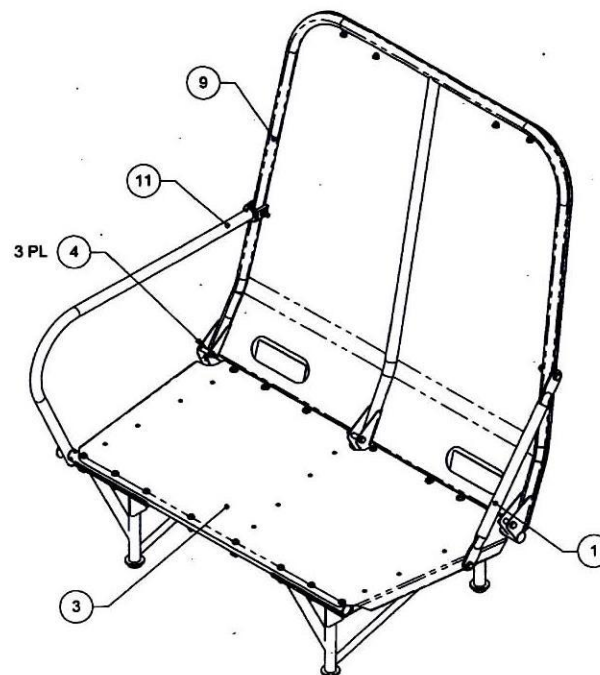
- 1) MATERIAL: AISI 4130N SHEET, 18 GAUGE (M4130N-S049)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: -Z: 0.12 lbs; -11: 0.01 lbs.

RELEASED
2015 FEB 04

DESIGN	CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	A.S.		
CHECKED	B	DRAWING NO.	REV. C
MFG. APPR.		D3017	SHEET 4 OF 4
APPROVED		TITLE	SCALE
DE APPR.		BACK FRAME ASSEMBLY	NTS
DATE	14.11.13	COPYRIGHT © 2001 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	

8 7 6 5 4 3 2 1

ITEM	QTY	P/N	DESCRIPTION
	X	D5162-041	SEAT STRUCTURE ASSEMBLY
1	1	D2199-31	STRUT
2	2	D3016-041	SEAT FRAME ASSEMBLY
3	1	D3022-1	SEAT PAN
4	3	D3024-1	SPACER
5	2	D3031-1	LOOP
6	1	D5159-041	SEAT BACK BRACE ASSY
7	1	D5159-043	SEAT BACK BRACE ASSY
8	1	D5159-045	SEAT RIB ASSY
9	1	D5162-051	SEATBACK ASSEMBLY
10	1	D5189-041	TUBE ASSEMBLY
11	1	D5189-043	ARMREST ASSEMBLY
12	3	AN3-12A	BOLT
13	1	AN4-6A	BOLT
14	1	AN4-4A	BOLT
15	2	AN4-14A	BOLT
16	1	AN970-4	WASHER
17	4	MS20600AD4W4	RIVET, BLIND
18	8	MS20600AD4W5	RIVET, BLIND
19	17	MS21042L3	NUT, SELF-LOCKING
20	8	MS21042L4	NUT, SELF-LOCKING
21	4	MS24693-S49	SCREW, CSK 100°
22	1	MS27039-1-17	SCREW, PAN-HEAD
23	3	MS27039-1-18	SCREW, PAN-HEAD
24	4	MS27039-1-19	SCREW, PAN-HEAD
25	2	MS27039-1-20	SCREW, PAN-HEAD
26	2	MS27039-4-21	SCREW, PAN-HEAD
27	4	MS27039-4-20	SCREW, PAN-HEAD
28	17	NAS1149D0432J	WASHER
29	30	NAS1149D0332J	WASHER
30	2	NAS43DD4-16FC	SPACER



D5162-041 SEAT STRUCTURE ASSEMBLY

GENERAL NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 19.1 lbs

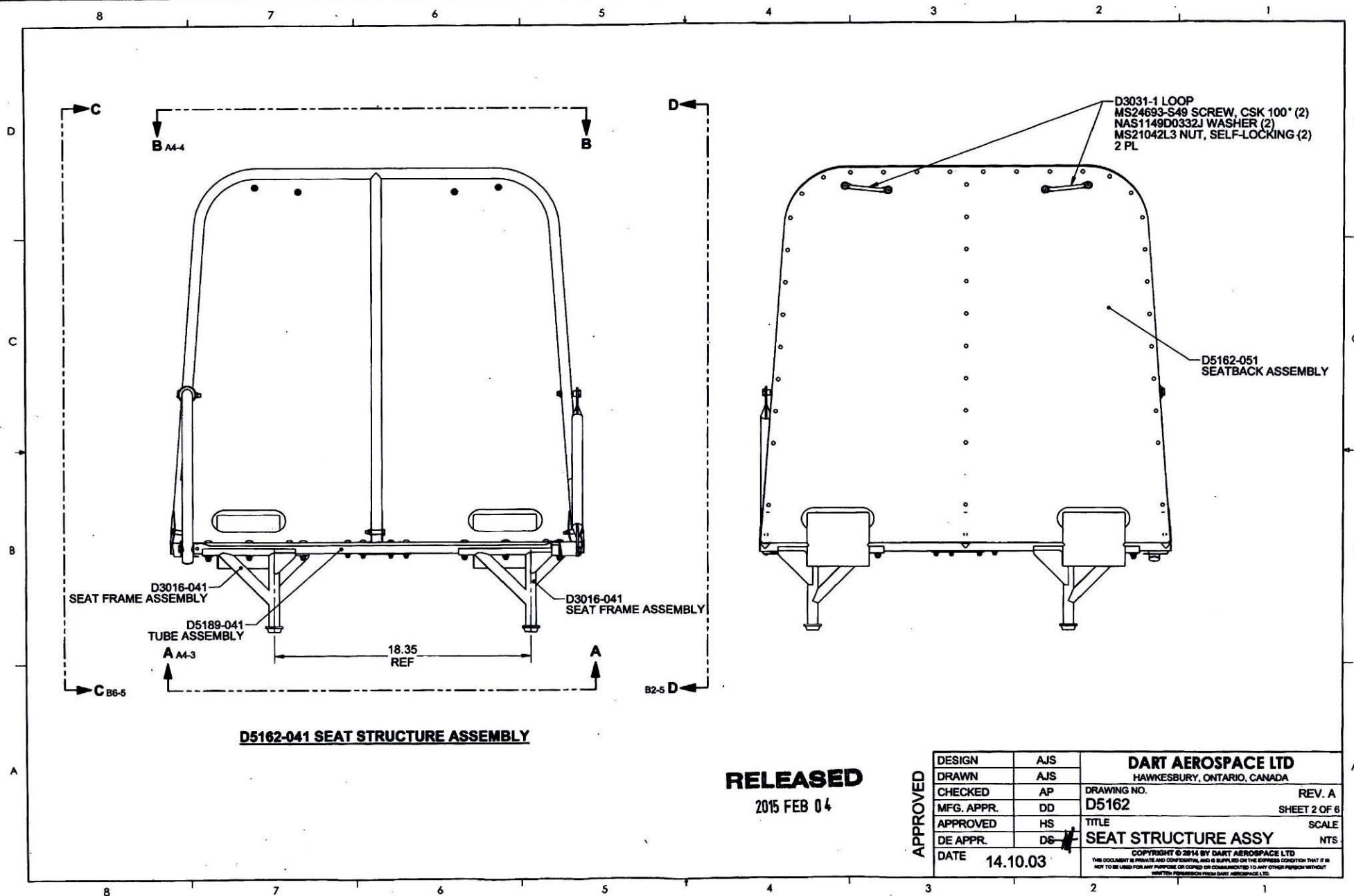
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ECN 0-522 49

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A	NEW ISSUE	AJS	14.10.03
REV.	DESCRIPTION	BY	DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS	DRAWING NO. REV. A	
CHECKED	AP	D5162 SHEET 1 OF 6	
MFG. APPR.	DD	TITLE SCALE	
APPROVED	HS	SEAT STRUCTURE ASSY NTS	
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D5189-043
ARMREST ASSEMBLY

AN4-4A BOLT
AN970-4 WASHER

D5159-045
SEAT RIB ASSY

D5159-041
SEAT BACK BRACE ASSY

D5159-043
SEAT BACK BRACE ASSY

D3022-1
SEAT PAN

2
AN4-6A BOLT
NAS1149D0432J WASHER
NAS43DD4-16FC SPACER

D2199-31 STRUT
REF

VIEW A-A B8-2
(SCALE 1.5X)

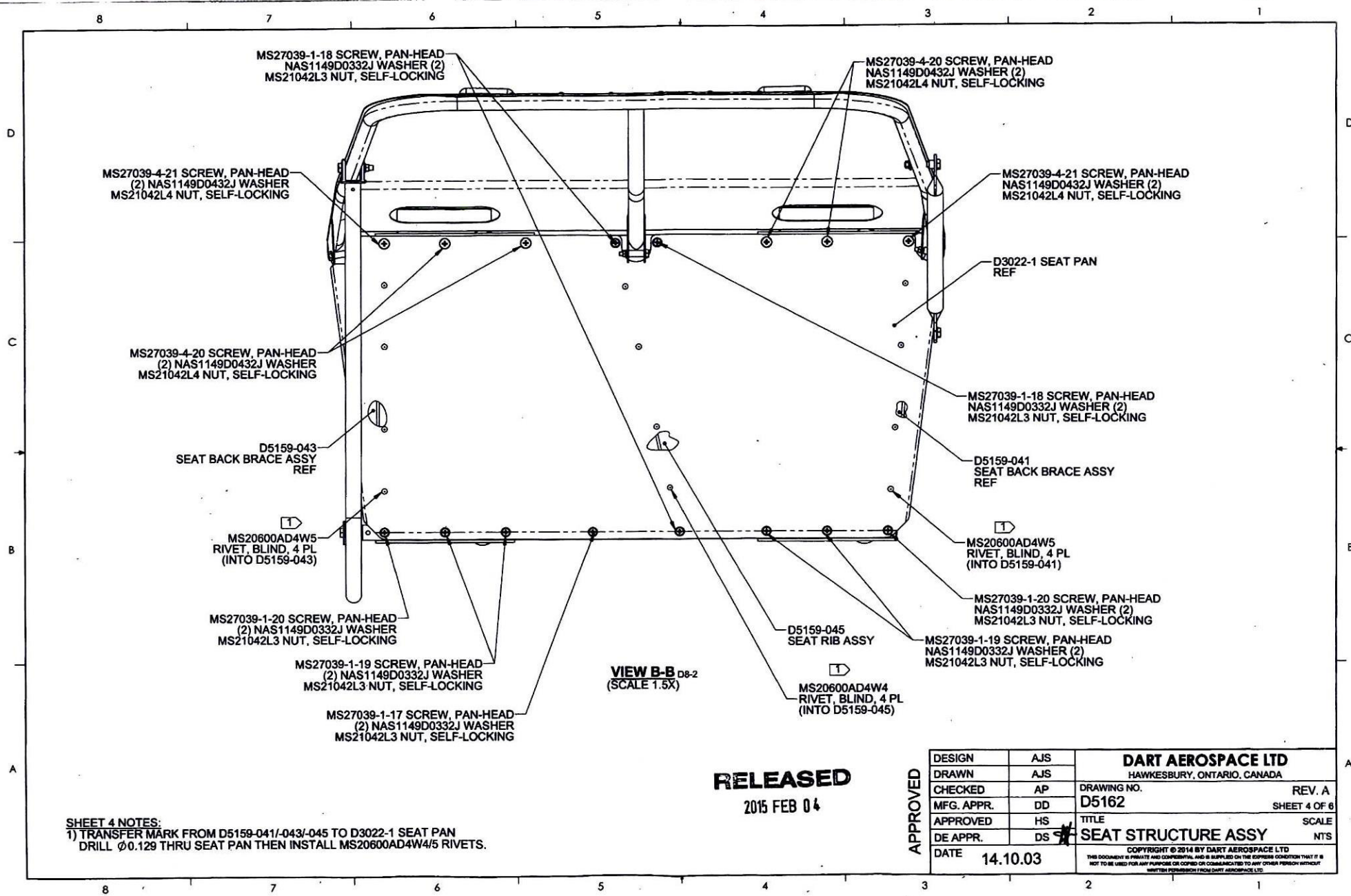
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SHEET 3 NOTES:

- 1) INSTALL D2199-31 STRUT AT SEAT PAN END FIRST
- 2) TRANSFER MARK FROM D5159-041 SEAT BACK BRACE ASSY TO D3022-1 SEAT PAN AND DRILL $\phi 0.386$ THRU D3022-1 SEAT PAN.

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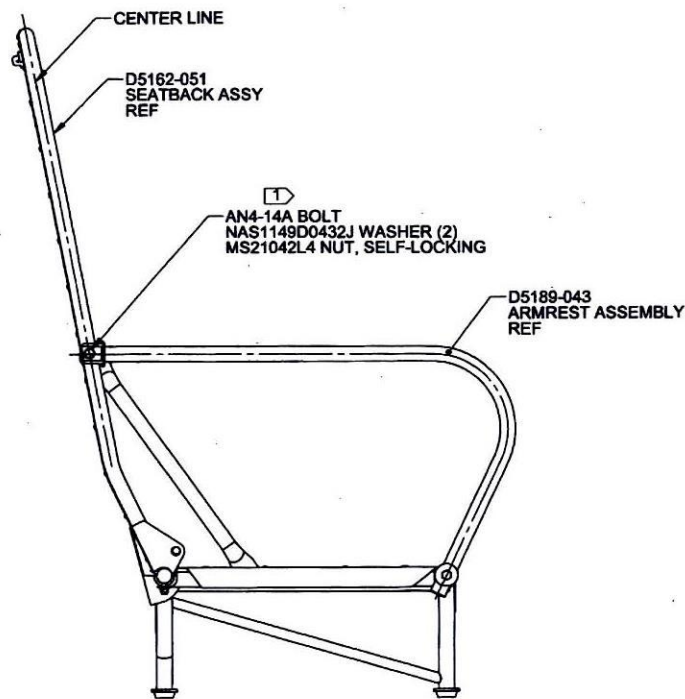


SHEET 4 NOTES:
 1) TRANSFER MARK FROM D5159-041/-043/-045 TO D3022-1 SEAT PAN
 DRILL Ø0.129 THRU SEAT PAN THEN INSTALL MS20600AD4W4/5 RIVETS.

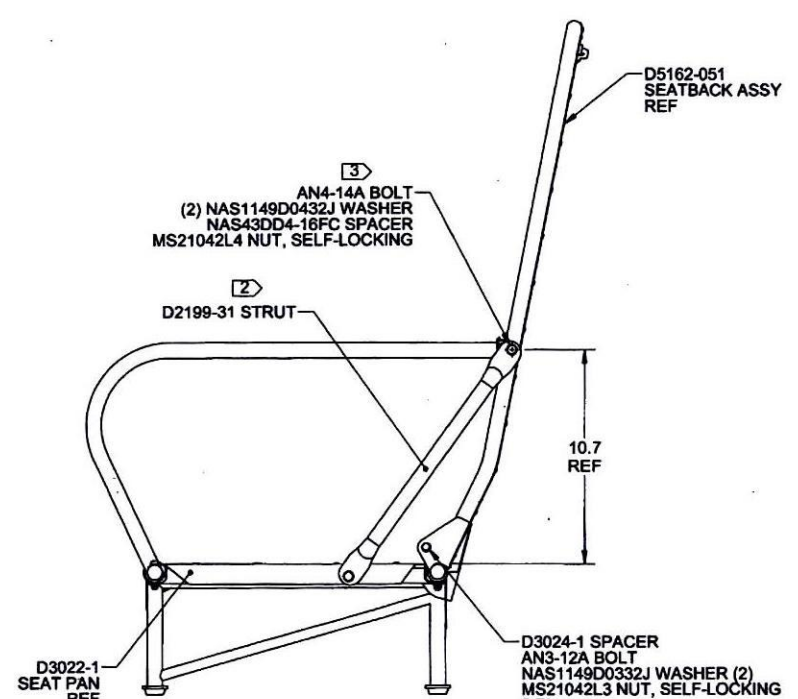
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VIEW C-C A8-2



VIEW D-D A5-2

SHEET 2 NOTES:

- 1) ALIGN THE PILOT HOLE ON THE D5189-043 ARMREST ASSEMBLY TO THE CENTERLINE ON THE D5162-051 BACK FRAME ASSEMBLY AND DRILL $\phi 0.257$ THRU THE D5189-043 AND D5162-051.
- 2) INSTALL D2199-31 STRUT AT SEAT PAN END FIRST
- 3) TRANSFER MARK FROM D2199-31 STRUT TO D5162-051 SEATBACK ASSY AND DRILL $\phi 0.266$ THRU D5162-051 SEATBACK ASSY

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ITEM	QTY	P/N	DESCRIPTION
	X	D5162-051	SEATBACK ASSEMBLY
1	1	D3017-041	BACK FRAME ASSEMBLY
2	1	D3023-1	BACK PANEL
3	46	MS20600AD4W2	RIVET, BLIND

D3017-041
BACK FRAME ASSEMBLY

MS20600AD4W2
RIVET, BLIND
46 PL

D3023-1
BACK PANEL

8 D5162-051 SEATBACK ASSEMBLY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 7.42 lbs
- 8) TRANSFER MARK FROM D3023-1 TO D3017-041.
DRILL Ø0.129 INTO THE D3017-041 (DRILL THRU ONE WALL ONLY).
THEN INSTALL MS20600AD4W2 RIVETS.

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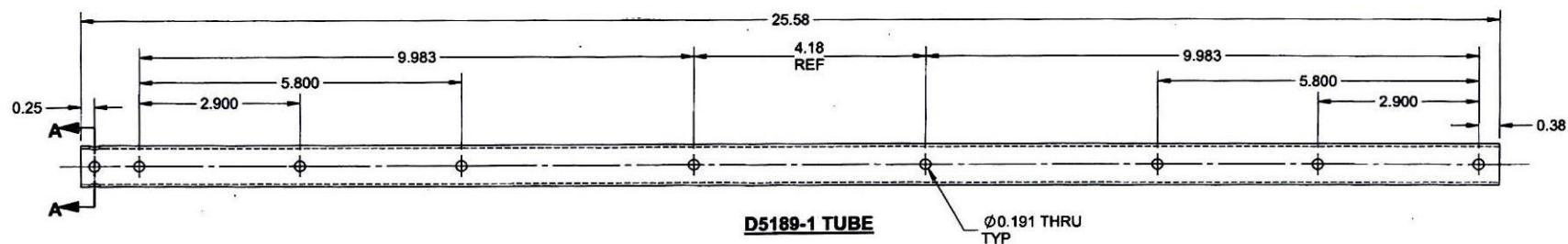
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CHECKED	AP	DRAWING NO.	REV. A
MFG. APPR.	DD	D5162	SHEET 6 OF 6
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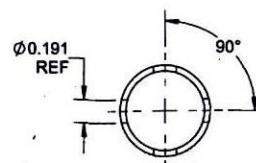
ITEM	QTY	P/N	DESCRIPTION
	X	D5189-041	TUBE ASSEMBLY
1	1	D3017-11	END CAP
2	1	D4667-041	ARMREST STUD ASSY
3	1	D5189-1	TUBE



D5189-041 TUBE ASSEMBLY



D5189-1 TUBE



SECTION A-A
SCALE 2X

NOTES:

- 1) MATERIAL -041: N/A
-1: AISI 4130N SEAMLESS STEEL TUBING, $\phi 0.750 \times 0.049$ WALL
PER MIL-T-6736 OR AMS 6371/6360/6361/6362/6373/6374
REF M4130NT0.750W0.049
- 2) FINISH -041: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.85 lbs
- 8) WELD PER DART QSI 004

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ECN 13-522

REV.	DESCRIPTION	BY	DATE
A	NEW ISSUE	AJS	14.11.18
DESIGN	AJS		
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APPROVED	HS		
DE APPR.	DS		
DATE	14.11.18		

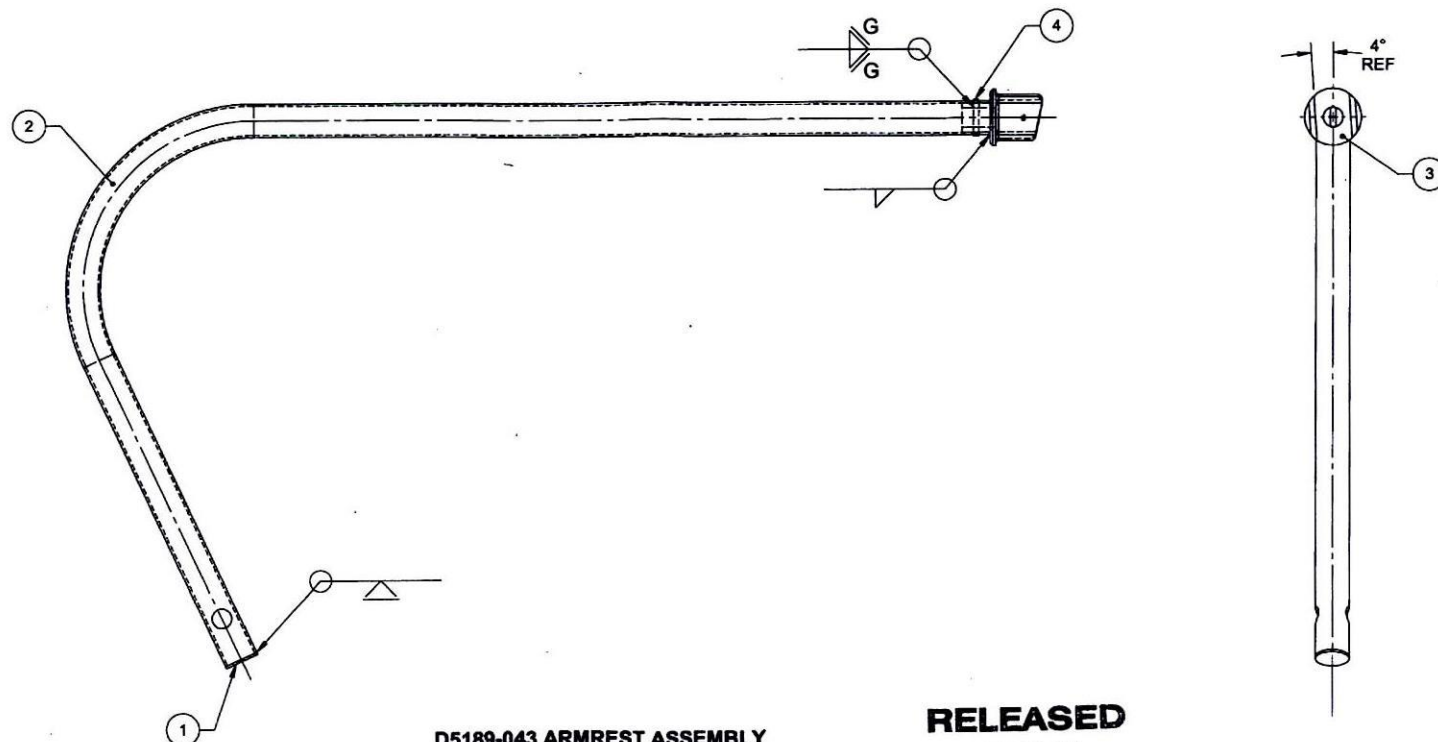
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DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA

DRAWING NO. **D5189** REV. A
SHEET 1 OF 3
TITLE **ARMREST COMPONENTS** SCALE NTS

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ITEM	QTY	P/N	DESCRIPTION
	X	D5189-043	ARMREST ASSEMBLY
1	1	D3017-11	END CAP
2	1	D5189-3	ARMREST
3	1	D5190-1	ARMREST FITTING
4	1	D5190-3	WELD PIN



D5189-043 ARMREST ASSEMBLY

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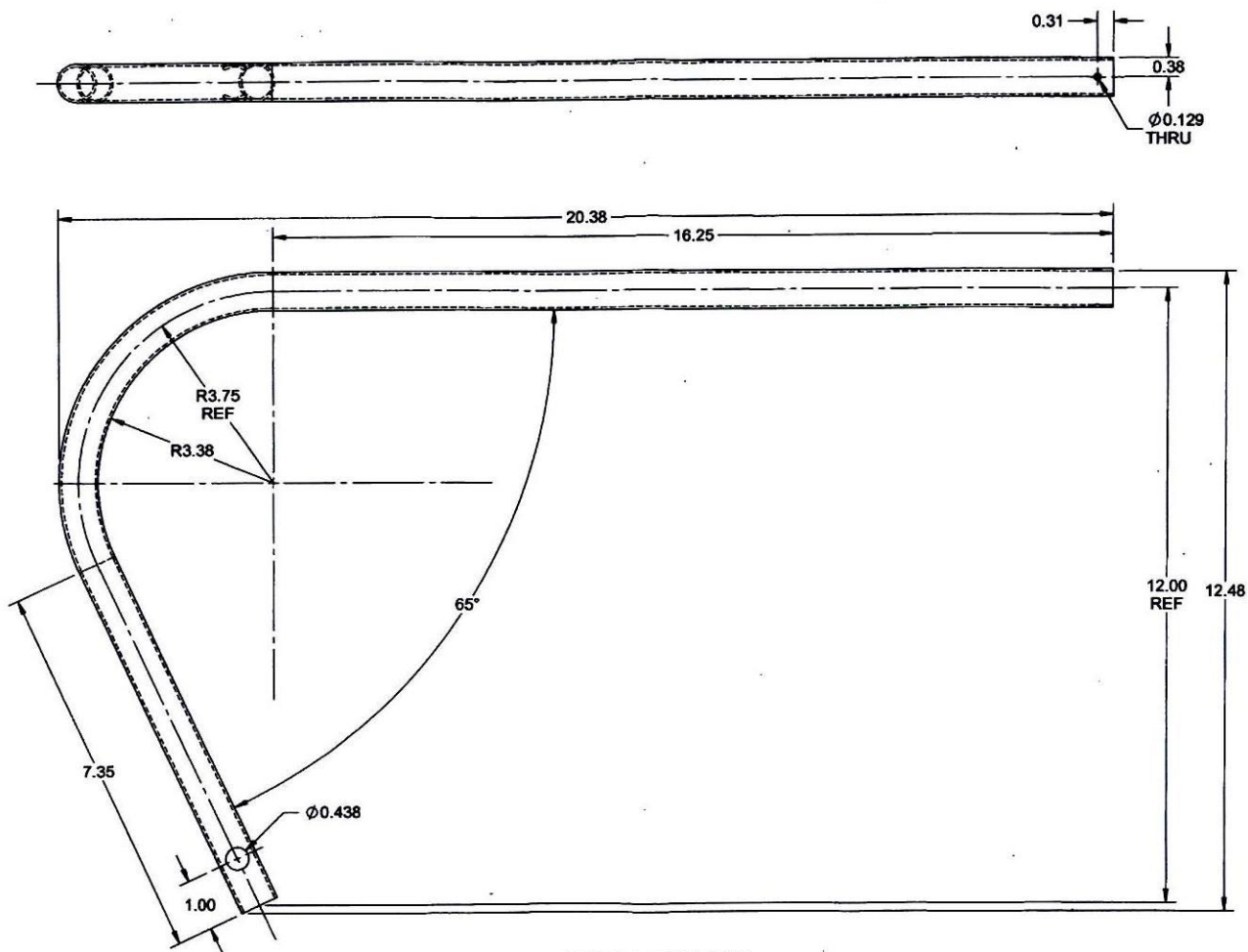
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NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT GREY SANDTEX (4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 1.08 lbs
- 8) WELD PER DART QSI 004

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D5189-3 ARMREST

NOTES:

- 1) MATERIAL: AISI 4130N SEAMLESS STEEL TUBING, $\phi 0.750 \times 0.049$ WALL
PER MIL-T-6736 OR AMS 6371/6360/6361/6362/6373/6374
REF M4130NT0.750W0.049
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.95 lbs

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